

AMENDMENTS TO THE CLAIMS

1-19. (Canceled).

20. (Currently Amended) An acoustic monitoring device for verifying the pressure setting of a valve mechanism in an implantable device having a plurality of adjustable valve settings, comprising:

a transmitter having a plurality of electromagnetic coils configured to generate an energy field sufficient to effect movement of the valve mechanism of the implantable device; and
an acoustic sensor electronically coupled to the transmitter for detecting acoustic signals generated by the valve mechanism during an adjustment cycle.

21. (Canceled).

22. (Original) The device of claim 20, wherein the energy field is a magnetic field.

23. (Original) The device of claim 20, further including a housing having a top surface, a bottom surface, and a central opening extending therethrough for containing the transmitter.

24. (Original) The device of claim 23, further including a tubular coupling member extending through the central opening and beyond the bottom surface of the housing.

25. (Original) The device of claim 24, wherein the tubular coupling member is configured to contact a patient's skin.

26. (Original) The device of claim 24, wherein the acoustic sensor is selectively disposed within the tubular coupling member.

27. (Original) The device of claim 26, wherein the acoustic sensor is electromagnetically isolated from the transmitter.

28. (Original) The device of claim 26, further including mechanical isolating pads surrounding the inner surface of the tubular coupling member.
29. (Original) The device of claim 26, wherein the sensor is seated on top of the tubular coupling member.
30. (Original) The device of claim 26, further including a plurality of feet extending from the bottom surface of the housing to focus the generated energy field on the valve mechanism.
31. (Previously Presented) The device of claim 20, further including a power source for driving the energy field.
32. (Original) The device of claim 20, further including a signal amplifier, a digitizing filter, and a data storage unit for transmitting any detected acoustic signals to a programmer for analysis.
33. (Original) The device of claim 32, further comprising means for wireless communication between the acoustic monitoring device and the programmer.
34. (Original) The device of claim 33, wherein the means for wireless communication comprises a wireless communication transmitter connected to the transmitter of the acoustic monitoring device.
35. (Withdrawn) The device of claim 24, wherein the acoustic sensor is adapted to be inserted into the housing after the housing is placed over the valve mechanism.
36. (Original) The device of claim 24, wherein the tubular coupling member is held in springing engagement with respect to the housing and self-adjusts to conform to the patient's anatomy.
37. (Currently Amended) An acoustic monitoring system for verifying the pressure setting of a valve mechanism in an implantable device having a plurality of adjustable valve settings, comprising:
an extracorporeal device for adjusting an opening pressure of the valve mechanism;

an extracorporeal transmitter configured to generate an energy field sufficient to cause movement of the valve mechanism; and

an extracorporeal acoustic sensor electrically coupled to the transmitter for detecting acoustic signals generated by the valve mechanism during an adjustment cycle;

wherein the transmitter communicates the detected acoustic signal to the device for analysis.

38. (Original) The system of claim 37, wherein the device includes a microprocessor that translates any detected acoustic signals into information for determining the success or failure of the adjustment cycle.

39. (Original) The system of claim 38, wherein the microprocessor classifies the acoustic signals into signals indicative of movements and signals indicative of positions.

40. (Original) The system of claim 39, wherein the microprocessor compares the actual streams of acoustic signals to an expected stream of acoustic signals to determine the success or failure of the adjustment cycle.

41. (Canceled).